CONSULTING ENGINEERS
COUNCIL OF OREGON

5319 S.W. Westgate Drive, Suite 107
Portland, Oregon 97221-2411
Telephone (503) 292-2348

Consulting Engineers Council of Oregon

1989-90 Membership Directory

Cover photograph
by Ackroyd Photography

Numerous CECO member firms have the Port of Portland as a client. This picture seemed especially appropriate because the photo represents facets of several on-going projects at Portland International Airport. This shot represents Phase I of the Concourse K development, with the new Delta Airlines terminal in the left foreground. The PDX parking structure lies midway in this photo. Not pictured is the Air Trans Center site which is south of the main terminal, adjacent to the Oregon Air National Guard base, with Runway 2-20 on the west side, and NE Cornfoot Rd. on the south side.

CONSULTING ENGINEERS COUNCIL OF OREGON
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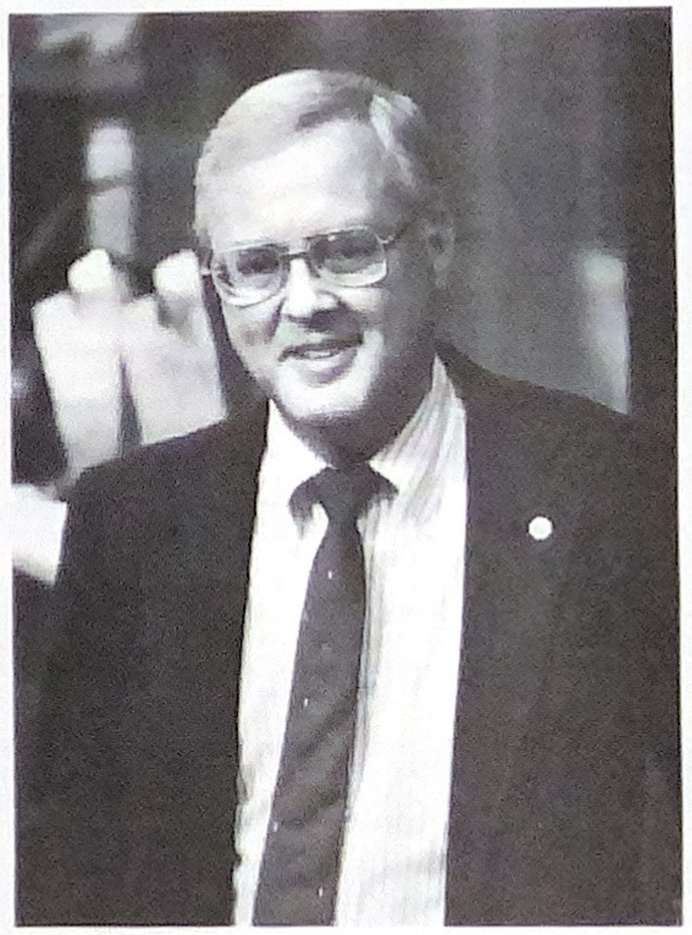
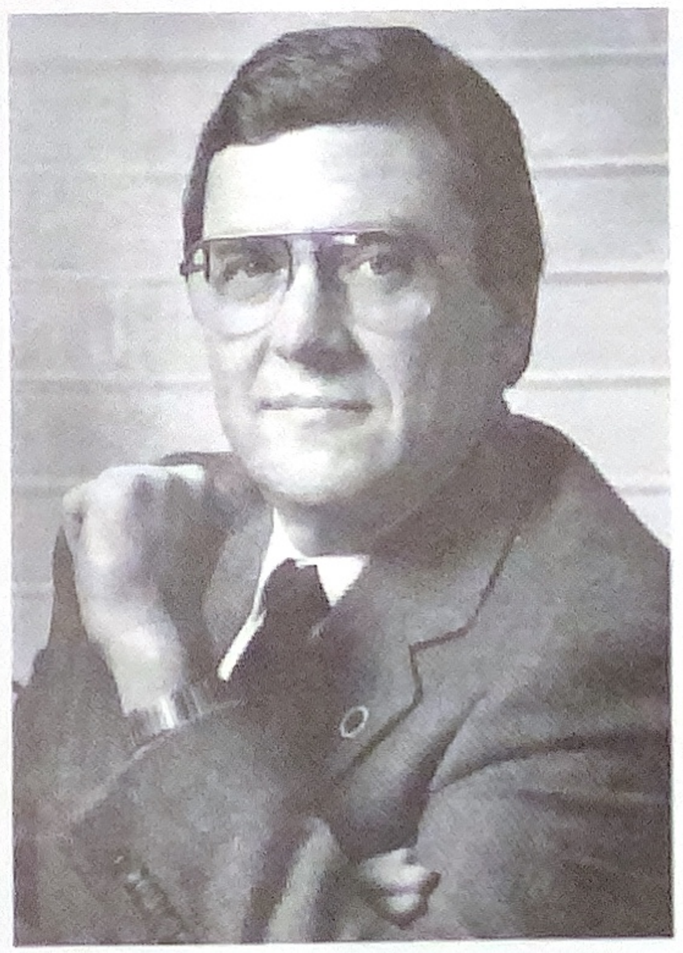
CONSULTING ENGINEERS COUNCIL OF OREGON
5319 SW WESTGATE DRIVE, SUITE 107
PORTLAND, OR 97221-2411 *(503) 292-2348*
FAX: 292-8237



***FRANK BUTCHART*, 1988-89 President**



***PATRICK KELLY*, 1988-89 President-Elect**

THE CONSULTING ENGINEERS COUNCIL OF OREGON

The Consulting Engineers Council of Oregon (CECO) was founded in 1956 as a non-profit self governing organization. It is incorporated under the laws of the State of Oregon to protect the public welfare and advance the professional quality of private practice consulting engineers.

The Consulting Engineers Council of Oregon is composed of qualified consulting engineering firms and their owners and principals. These are admitted to membership upon acceptance by the Board of Directors of CECO after thorough investigation of each applicant's experience, business practices, and technical qualifications. Consulting engineering activities of member firms are conducted under the responsible charge of professional engineers who are required to maintain their engineering registration in Oregon.

The Consulting Engineers Council of Oregon is affiliated with the American Consulting Engineers Council (ACEC), which represents 4900 firms throughout the United States. CECO and ACEC provide their members with guidelines and assistance for continuing improvement of consulting engineering and furnish an important forum for broadening engineering services. Member firms avail themselves of the many opportunities for cooperation, exchange of information, and mutual reliance afforded by membership in these organizations. The resulting collaboration and continuous updating of knowledge and technology are of distinct benefit to all clients of the member consulting engineering firms.

Engineering excellence requires that consulting engineers use modern administrative practices as well as the latest engineering technology, so that the highest possible engineering quality is provided the client and the public in an efficient manner and at reasonable cost.

By participating in an organization which strives for engineering excellence and technological enhancement, our member firms dedicate themselves to adherence to the highest professional principles and to maintaining technological expertise and business acumen of a degree to benefit all clients.

WHEN TO RETAIN A CONSULTING ENGINEER

A consulting engineer should be retained when projects and programs involving engineering issues and requiring engineering decisions are to be undertaken.

The engineer may be retained as a general consultant in technical matters, to investigate and study alternatives, to design projects and equipment, and to assist during production or construction.

The project may be public or private, large or small; it may be an addition, a renovation, or an entirely new project.

A consulting engineer has specialized engineering knowledge, independent, objective and unbiased judgment with respect to methods, material and manpower, and broad engineering experience. These factors are drawn together in direct service to the client, with time and staff arranged to the most useful application of professional engineering in the client's best interests.

When appropriate, the consulting engineer will provide construction management, furnishing continuity of responsibility through the project's completion, thus freeing the client to pursue his regular endeavors.

Many engineering firms use the systems approach to planning and engineering, combining such capabilities as economics, management, marketing and sociology.

A consulting engineer should be engaged at the earliest stage of a project to develop the plan, determine its feasibility, aid in arranging finances and analyzing costs, design the project, supervise construction arrangements, and test or verify the completed facility for acceptance by the client. The consulting engineering firm becomes a temporary engineering staff, serving management, or may augment and extend the technical ability of an existing engineering staff.

HOW TO SELECT A CONSULTING ENGINEER

Determine the nature of the service needed from the Engineering Services listed in this publication. Select one or more firms for individual conference.

Discuss at each conference the nature and scope of the project, time schedule and availability, and any special conditions. Review the firm's professional qualifications, technical experience and range of services provided. Investigate the firm's reference list of similar projects.

Size of firm is not necessarily a criterion for selection. The consulting engineer can determine his competence to undertake the project in terms of size and capacity and may retain other members for specific functions instead of maintaining a staff of specialists. Select the firm which appears best suited for the project and confirm the selection by mutual agreement.

CECO recommends that selection of a consulting engineer be based on competence, integrity, and availability for the contemplated assignment, and mutual confidence between client and engineer, rather than the price.

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While the selection process should be competitive, the competition should compare the competence, integrity, experience, and reputation of the firms. It is in the client's best interest to discuss engineering fees only after a firm has been selected. This will avoid the possibility of increased total cost, operating and maintenance difficulties, and other dissatisfaction that may result from inferior professional service.

It must be remembered that the engineering fee is but a small portion of the total project cost and that thorough engineering - with consideration of all alternatives - can save costs and assure satisfactory performance and longer life of the project.

NEGOTIATION OF FEES

After selecting a firm, determination of the extent of services and negotiation of fees should culminate in an agreement.

If a planning and/or feasibility study is recommended, it should be negotiated as a separate project. This will provide the client and the consulting engineer with the experience of working together.

A clear understanding between client and engineer of individual and mutual responsibilities concerning their nature and extent of service required—including special conditions and services—and should precede negotiation of fee and signing of agreements.

Engineering fees may be based on Per Diem, Cost times a Factor, Lump Sum, or Percentage of Project Cost—depending on the nature and location of the project; traditional, percentage fees are proving least advantageous to both client and engineer for many types of services. Heed the advice of your selected consulting engineer on the fee basis best suited to your project.

A consulting engineer's fee normally includes cost of services of principals and staff; maintenance of office and engineering equipment; design drawings and specifications, and other communication media; site visitations to verify competence of work performed.

ADDITIONAL ARRANGEMENTS

Environmental impact statements and similar declarations to conform with government regulations; investigations; other consulting engineers or technical firms engaged; unusual amount of site activities; resident supervision; more than stipulated number of drawings and specifications; major changes to plan; construction management.

COORDINATED SERVICES TYPICAL TO A PLANNED PROJECT

Planning of Project

Preliminary Layout, Cost Estimates
- Arrangements for investigations

Design
- Completed design drawings and specifications
- Assistance with bidding procedures
- Contract documents advice
- Revised cost estimates

Activities During Construction
- Review of contractor's work
- Consultation
- Payments reviewed and approved
- Arrangements for inspections
- Arbitration of disputes

Completion
- Testing or inspection of equipment
- Provisions for manuals of operation and maintenance
- Acceptance of final payments recommended
- Record drawings

Additional assistance may be obtained from any member of the Council or its Executive Director.

CONSULTING ENGINEERS COUNCIL OF OREGON
Michelle McKenna, Executive Director
5319 S.W. Westgate Drive, Suite 107
Portland, Oregon 97221-2411
Telephone (503) 292-2348

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ENGINEERING DISCIPLINES

ACOUSTICAL
- Architectural Acoustics
- Community Noise
- Plant or Product Noise

CHEMICAL & ENVIRONMENTAL
- Air/Waste/Water Pollution Abatement
- Analysis, Investigations, Studies
- Corrosion, Metallurgy, Microscopy

CIVIL
- Dams and Appurtenant Structures
- Highways, Streets, Bridges
- Land Surveys, Site Planning, Urban Planning
- Recreactional Facilities
- Tunnels
- Utility Systems
- Water and Sewerage Systems
- River Basin Studies
- Irrigation
- Water Supply
- Flood Control
- Hydrology

ELECTRICAL
- Building Wiring
- Communications
- Electric and Electronic Systems
- Elevators and Escalators
- Fire Protection Systems
- Instrumentation and Control
- Lighting
- Power Production and Transmission
- Signal Systems

FIRE PREVENTION
- Analysis, Investigations, Studies

FORESTRY
- Timber Estimates, Appraisals
- Roads, Earthworks, Drainage
- Feasibility Studies

GEOTECHNICAL
- Foundation Studies
- Geological Investigations
- Ground Water Investigations
- Soils Investigation and Testing
- Soil and Rock Mechanics

INDUSTRIAL
- Management Studies
- Manufacturing Economics
- Manufacturing Facilities
- Operations Analysis and Scheduling
- Production Methods and Processes

LOGGING
- Planning Operations
- Forest Roads
- Selection of Equipment
- Feasibility Studies

MARINE
- Naval Architecture
- Vessel Design
- Repair/Conversion

MATERIALS
- Chemical Analysis
- Extracting and Refining
- Laboratory and Field Testing
- Metallurgical Analysis

MECHANICAL-HVAC
- Air Conditioning
- Boiler Plants
- Cold Storage
- Heating
- Heat Transfer
- Ice Plants
- Ventilation

MECHANICAL-MECHANISMS
- Industrial Processes
- Machine Design
- Materials Handling
- Mechanical Apparatus
- Plant Layout
- Product Design
- Stress Analysis

METALLURGICAL
- Microscopy
- Metallurgy

PHOTOGRAMMETRIC
- Aerial Surveys
- Topographic Mapping

STRUCTURAL
- Bridges
- Buildings
- Foundations
- Structural Analysis
- Towers

TRANSPORTATION
- Airports
- Parking Systems
- Railroads
- Transportation Systems

FIELDS OF PRACTICE

CECO MEMBER FIRMS	CITY	ST	PHONE NO.	PG NO.
ACOUSTICAL ENGINEERS				
CH2M HILL	Corvallis	OR	752-4271	9
Duble, Albert G. Engineering	Newberg	OR	244-8134	10
Glumac and Associates	Portland	OR	227-5280	11
JGL Acoustics, Inc.	Bellevue	WA	206-747-2229	12
MEI Charlton, Inc.	Portland	OR	228-9663	15
R & W Engineering, Inc.	Portland	OR	297-5676	15
Van Gulik/Oliver, Inc. Engineers	Lake Oswego	OR	635-3734	17
CHEMICAL/ENVIRONMENTAL ENGINEERS				
Braun, Ltd.	Hillsboro	OR	648-2900	7
CH2M HILL	Corvallis	OR	752-4271	9
Fujitani Hilts & Associates, Inc.	Portland	OR	223-6147	11
Kramer, Chin & Mayo, Inc.	Portland	OR	684-9097	13
SRH Environmental Mgmt, Inc.	Portland	OR	252-8316	16
CIVIL ENGINEERS				
Al-Hadi, Farouk H. & Assoc/MKF Intl.	Lake Oswego	OR	636-7981	7
Alpha Engineering, Inc.	Portland	OR	297-1458	7
Anderson-Perry & Associates	La Grande	OR	963-8309	7
Appel Engineering Services	Eugene	OR	683-2618	7
Beeman, Ogden & Associates, Inc.	Portland	OR	223-8254	7
Boatwright Engineering, Inc.	Salem	OR	363-9225	7
Breedlove, McConnell, Granning, Pease	Portland	OR	222-6886	8
Brown & Caldwell	Eugene	OR	686-9915	8
Brown, W. Engineering Company	Portland	OR	654-8232	8
Carter, Elden W. Consulting Engr	Portland	OR	775-1556	8
CH2M HILL	Corvallis	OR	752-4271	9
Columbia Engineering Intl	Eugene	OR	342-3656	9
Cooper Consultants, Inc.	Portland	OR	659-4914	9
Crom, James Consulting Engr	Lake Oswego	OR	636-5176	9
CRS SIRRINE, Inc.	Portland	OR	274-6277	9
Cunningham Associates	Milwaukie	OR	653-0753	10
Curran-McLeod, Inc.	Portland	OR	684-3478	10
De Haas & Associates	Wilsonville	OR	682-2450	10
Ebeling, Dick W. Inc.	Portland	OR	639-6601	11
ETS Pacific, Inc	Portland	OR	297-4561	11
Haner, Ross & Sporseen	Gladstone	OR	657-1384	11
Hill, R.J. Engineering Company	Eugene	OR	344-9116	12
KPFF Consulting Engineers	Portland	OR	227-3251	12
Kampe Associates, Inc.	Lake Oswego	OR	635-6291	12
Keech, Robert P.E. Inc.	Portland	OR	641-6333	12
Klein Consulting Engineers, Inc.	Forest Grove	OR	359-5956	13
Kramer, Chin & Mayo, Inc.	Portland	OR	684-9097	13
Kramer-Gehlen & Associates	Vancouver	WA	206-693-1621	13
Lee Engineering, Inc.	Oregon City	OR	655-1342	13
Mater Engineering, LTD	Corvallis	OR	753-7335	14
McDonald, John Engineering	Portland	OR	774-0077	14
MEI Charlton, Inc.	Portland	OR	228-9663	14
Meigs, Gilbert R. Consulting Engr	Portland	OR	223-3033	14
Meyer, Robert E. Consultants	Beaverton	OR	643-7531	14
Moffatt, Nichol and Bonney, Inc.	Portland	OR	232-2117	14
Murray, Smith & Associates, Inc.	Portland	OR	225-9010	15
OBEC Consulting Engineers	Eugene	OR	683-6090	15
Pavement Services, Inc.	Portland	OR	227-7630	15
Pease & Beadling Engineers	Portland	OR	221-1484	15
Perry Engineering	Lake Oswego	OR	636-8969	15
Resseger & Gotchall Engineers	Milwaukie	OR	659-5913	15
Schaudt, Stemm & Wild	Eugene	OR	485-8383	16
Smith & Monroe & Gray Engineers	Beaverton	OR	643-8595	16
Talbott Engineers, Inc.	Portland	OR	256-3852	16
Tenneson Engineering Corporation	The Dalles	OR	296-9177	16
Trapp, David L. & Associates	Woodburn	OR	981-3181	16
URS Consultants	Portland	OR	238-7050	16
Van Domelen/Looijenga Associates	Portland	OR	222-4453	17
Westech Engineering, Inc.	Salem	OR	585-2474	17
Wilsey & Ham Pacific, Inc.	Portland	OR	227-0455	17
Wright, R.A. Engineering	Portland	OR	246-4293	17
Youngman, Charles L. Inc.	Salem	OR	364-8207	17
Zachrison, J.R. Consulting Engr	Boring	OR	663-5793	17
Zarosinski-Tatone Engineers	Portland	OR	235-8795	17
ELECTRICAL ENGINEERS				
Baisley-McNees & Associates	Portland	OR	231-7825	7
Brown & Caldwell	Eugene	OR	686-9915	8
Carroll, Hatch & Associates	Portland	OR	292-1363	8
Carson, Bekooy, Gulick & Assoc.	Portland	OR	227-4405	8
CH2M HILL	Corvallis	OR	752-4271	9
Columbia Consulting Engineers	Portland	OR	243-2850	9
Dhillon Engineers, Inc.	Portland	OR	228-2877	10
Elcon Associates, Inc.	Beaverton	OR	644-2490	11
Glumac and Associates	Portland	OR	227-5280	11
Graham, James D. & Associates	Portland	OR	241-1993	11
Interface Engineering, Inc.	Milwaukie	OR	659-6394	12
Knudson Engineers, Inc.	Portland	OR	620-7675	13
MFIA, Inc.	Portland	OR	234-0548	13
Murphy, Eldo R. & Associates	Salem	OR	363-0385	14
PAE Consulting Engineers, Inc.	Portland	OR	226-2921	15
Perkins Engineering, Inc.	Portland	OR	246-6311	15
R & W Engineering, Inc.	Portland	OR	297-5676	15
URS Consultants	Portland	OR	238-7050	16
Van Gulik/Oliver, Inc. Engineers	Lake Oswego	OR	635-3734	17
FIRE PREVENTION ENGINEERS				
Williams, John and Associates	Portland	OR	225-5285	17
GEOTECHNICAL ENGINEERS				
Anderson-Perry & Associates	La Grande	OR	963-8309	7
CH2M HILL	Corvallis	OR	752-4271	9
Cornforth Consultants, Inc.	Portland	OR	684-3201	10
Dames & Moore	Portland	OR	228-7688	10
Fujitani Hilts & Associates, Inc.	Portland	OR	223-6147	11
Geotechnical Resources, Inc.	Portland	OR	292-2621	11
Kelly/Struzer Associates, Inc.	Portland	OR	222-2820	12
McDonald, John Engineering	Portland	OR	774-0077	14
Rittenhouse-Zeman & Associates	Portland	OR	639-3400	16
Squier, L.R. Associates, Inc.	Lake Oswego	OR	635-4419	16
INDUSTRIAL ENGINEERS				
CH2M HILL	Corvallis	OR	752-4271	9
Columbia Engineering International	Eugene	OR	342-3656	9
Crow Engineering Company	Portland	OR	639-8404	9
CRS SIRRINE, Inc.	Portland	OR	274-6277	9
Crumme, Ralph S. & Associates	Ashland	OR	482-9118	10
Dresden, Anton Consulting Engr	Lake Oswego	OR	636-1888	10
ETS Pacific, Inc.	Portland	OR	297-4561	11
Hill, R.J. Engineering Company	Eugene	OR	344-9116	12
Horstkotte, F.W. & Associates	Portland	OR	223-3014	12
Johnston, T.L. & Associates	Portland	OR	282-4118	12
Kramer, Chin & Mayo, Inc.	Portland	OR	684-9097	13
Management Engineering Assoc.	Camas	WA	206-834-3004	14
Mater Engineering, LTD	Corvallis	OR	753-7335	14
MEI Charlton, Inc.	Portland	OR	228-9663	14
Miles, Thomas R. Cons Design Engr.	Portland	OR	292-0107	14
Pease & Beadling Engineers	Portland	OR	221-1484	15
R & W Engineering, Inc.	Portland	OR	297-5676	15
MARINE ENGINEERS				
Emerson, Parker C. & Associates	Lake Oswego	OR	638-7286	11
MATERIALS ENGINEERS				
MEI Charlton, Inc.	Portland	OR	228-9663	14
MECHANICAL-HVAC ENGINEERS				
Billings, Chris & Associates, Inc.	Portland	OR	228-0008	7
Brown & Caldwell	Eugene	OR	686-9915	8
Carson, Bekooy, Gulick & Assoc	Portland	OR	227-4405	8
CH2M HILL	Corvallis	OR	752-4271	9
Darden Engineering Company	Portland	OR	234-2725	10
Dhillon Engineers, Inc.	Portland	OR	228-2877	10
DJ Associates, Consulting Engrs	Portland	OR	292-1965	10
Elcon Associates, Inc.	Beaverton	OR	644-2490	11
ETS Pacific, Inc.	Portland	OR	297-4561	11
Glumac and Associates	Portland	OR	227-5280	11
Interface Engineering, Inc.	Milwaukie	OR	659-6394	12
KEI-Krucheck Engineers, Inc.	Portland	OR	222-1374	12
Kramer, Chin & Mayo, Inc.	Portland	OR	684-9097	13
Leshuk, J.P., P.E.	Salem	OR	362-7117	13
MFIA, Inc.	Portland	OR	234-0548	13
Manfull*Curtis, Inc.	Beaverton	OR	643-6761	14
R & W Engineering, Inc.	Portland	OR	297-5676	15
Van Gulik/Oliver, Inc. Engineers	Lake Oswego	OR	635-3734	17
Zanders, Robert W. & Associates	Portland	OR	224-4822	18

CECO MEMBER FIRMS	CITY	ST	PHONE NO.	PG NO.
MECHANICAL-MECHANISMS ENGINEERS				
Aikins, Stanley E., Consulting Engr	Lake Oswego	OR	636-0261	7
Braun, Ltd.	Hillsboro	OR	648-2900	7
Carroll, Hatch & Associates	Portland	OR	292-1363	8
Columbia Engineering International	Eugene	OR	342-3656	9
CH2M HILL	Corvallis	OR	752-4271	9
Crow Engineering Company	Portland	OR	639-8404	9
Crumme, Ralph S. & Associates	Ashland	OR	482-9118	10
Darden Engineering Company	Portland	OR	234-2725	10
Dresden, Anton Consulting Engr	Lake Oswego	OR	636-1888	10
Elcon Associates, Inc.	Beaverton	OR	644-2490	11
Fritz, D.W. Consulting Engineer	Lake Oswego	OR	635-6606	11
Hill, R.J. Engineering Company	Eugene	OR	344-9116	12
Horstkotte, F.W. & Associates	Portland	OR	223-3014	12
Johnston, T.L. & Associates	Portland	OR	282-4118	12
Management Engineering Assoc	Camas	WA	206-834-3004	14
Mater Engineering, LTD	Corvallis	OR	753-7335	14
MEI Charlton, Inc.	Portland	OR	228-9663	14
Miles, Thomas R. Cons Design Engr.	Portland	OR	292-0107	14
Oregon Technical Services Center	Portland	OR	292-9663	15
PAE Consulting Engineers, Inc.	Portland	OR	226-2921	15
Talbott Engineers, Inc.	Portland	OR	256-3852	16
Try, Robert W. Consulting Engineer	Sherwood	OR	625-5684	16
URS Corporation	Portland	OR	238-7050	16
Van Gulik/Oliver, Inc. Engineers	Lake Oswego	OR	635-3734	17
Wong's Forensic & Metallurgical	Portland	OR	233-3600	17
METALLURGICAL ENGINEERS				
MEI Charlton, Inc.	Portland	OR	228-9663	14
Oregon Technical Services Center	Portland	OR	292-9663	15
Talbott Engineers, Inc.	Portland	OR	256-3852	16
Wong's Forensic & Metallurgical Engrs.	Portland	OR	233-3600	17
PHOTOGRAMMETRIC ENGINEERS				
CH2M HILL	Corvallis	OR	752-4271	9
Gross, Spencer B., Inc.	Portland	OR	646-1733	11
STRUCTURAL ENGINEERS				
Al-Hadi, Farouk H. & Assoc/MKF Intl.	Lake Oswego	OR	636-7981	7
Appel Engineering Services	Eugene	OR	683-2618	7
Breedlove, McConnell, Granning, Pease	Portland	OR	222-6886	8
Brown & Caldwell	Eugene	OR	686-9915	8
Brown, W. Engineering Company	Portland	OR	654-8232	8
Carlson, Stanley Associates	Lake Oswego	OR	635-3414	8
CH2M HILL	Corvallis	OR	742-4271	9
Columbian Engineering Intl	Eugene	OR	342-3656	9
Cooper Consultants, Inc.	Portland	OR	659-4914	9
CRS SIRRINE, Inc.	Portland	OR	274-6277	9
Design Edge Services	Portland	OR	238-1112	10
Ebeling, Dick W. Inc.	Portland	OR	639-6601	11
ETS Pacific, Inc	Portland	OR	297-4561	11
Haner, Ross & Sporseen	Gladstone	OR	657-1384	11
Hill, R.J. Engineering Company	Eugene	OR	344-9116	12
Holmes/Entenman Engineers, Inc.	Portland	OR	226-1260	12
Johnston, T.L. & Associates	Portland	OR	282-4118	12
KPFF Consulting Engineers	Portland	OR	227-3251	12
Kramer, Chin & Mayo, Inc.	Portland	OR	684-9097	13
Kramer-Gehlen & Associates	Vancouver	WA	206-693-1621	13
Lee Engineering, Inc.	Oregon City	OR	655-1342	13
Lundervold, Jim Engineers, Inc.	Portland	OR	284-6375	13
Miller, R.T. Engineering, Inc.	Portland	OR	248-1955	14
Moffatt, Nichol and Bonney, Inc.	Portland	OR	232-2117	14
OBEC Consulting Engineers	Eugene	OR	683-6090	15
Pease & Beadling Engineers	Portland	OR	221-1484	15
Perry Engineering	Lake Oswego	OR	636-8969	15
Resseger & Gotchall Engineers	Oregon City	OR	631-2095	15
Rose, Rowland S. Engineering	Portland	OR	222-6886	16
Schaudt, Stemm & Wild	Eugene	OR	485-8383	16
Smith & Monroe & Gray Engineers	Beaverton	OR	643-8595	16
Talbott Engineers, Inc.	Portland	OR	256-3852	16
Trapp, David L. & Associates	Woodburn	OR	981-3181	16
URS Consultants	Portland	OR	238-7050	16
Van Domelen/Looijenga Associates	Portland	OR	222-4453	17
Westech Engineering, Inc.	Salem	OR	585-2474	17
Wilsey & Ham	Portland	OR	227-0455	17
Youngman, Charles L., Inc.	Salem	OR	364-8207	17
Zachrison, J.R. Consulting Engr	Boring	OR	663-5793	17
Zarosinski-Tatone Engineers	Portland	OR	235-8795	17
TRAFFIC AND TRANSPORTATION ENGINEERS				
Buttke, Carl H. Inc.	Portland	OR	223-4728	8
CH2M HILL	Corvallis	OR	752-4271	9
Cooper Consultants, Inc.	Portland	OR	659-4914	9
CRS SIRRINE, Inc.	Portland	OR	274-6277	9
ETS Pacific, Inc.	Portland	OR	297-4561	11
Keech, Robert P.E., Inc.	Portland	OR	641-6333	12
Kittelson & Associates	Portland	OR	228-5230	13
Kramer, Chin & Mayo, Inc.	Portland	OR	684-9097	13
URS Consultants	Portland	OR	238-7050	16
Wilsey & Ham	Portland	OR	227-0455	17

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REGISTER OF CONSULTING ENGINEERING FIRMS

MEMBER FIRMS — **EMPLOYEES**

STANLEY E. AIKINS, CONSULTING ENGINEER 1
17325 S.W. Banyan Lane
Lake Oswego, OR 97034-6901
(503) 636-0261
Principals: Stanley E. Aikins
Activities: Cost estimates, studies, plant layouts and design for the forest products industries. Mechanisms and machine designs.
Ownership: Private-sole proprietorship

FAROUK H. AL-HADI & ASSOC/MKF INTL 1
1201 SW 12th, #320
Portland, OR 97205
(503) 222-5040 FAX: (503) 222-7299
Principals: Farouk H. Al-Hadi
Activities: Site developments, feasibility studies, bridges, docks, structural designing and plans for commercial and industrial buildings.
Ownership: Private-sole proprietorship

ANDERSON-PERRY & ASSOCIATES, INC. 17
1901 North Fir / P.O. Box 1107
La Grande, OR 97850-0939
(503) 963-8309
Principals: Stephen C. Anderson, Howard L. Perry, Keith Olson, Gary Langlitz
Activities: Sewer, water, and storm drainage planning and design. Soils investigations, soils, asphalt, aggregate and concrete testing. Surveys and subdivisions. Roadway, airport and bridge design. Feasibility studies, project planning, environmental impact statements, contract administration and construction inspection.
Ownership: Privately-owned corporation

APPEL ENGINEERING SERVICES 2
123 Monroe Street, Suite 2
Eugene, OR 97402
(503) 683-2618
Principals: H. Douglas Appel
Activities: Structural inspections and reports, structural design, construction surveying and inspection, site and subsurface investigations, earthwork and drainage engineering, environmental planning. Engineering feasibility studies.
Ownership: Private-sole proprietorship

BAISLEY- McNEES & ASSOCIATES 3
1923 S.E. Stark Street
Portland, OR 97214-1549
(503) 231-7825 FAX: (503) 231-8309
Principals: Wayne J. Baisley, Elof G. Anderson, Harold E. McNees
Activities: Electrical engineering, design and consulting services.
Ownership: Privately-owned corporation

OGDEN BEEMAN & ASSOCIATES, INC. 6
522 S.W. Fifth Avenue, Suite 825
Portland, OR 97204-2125
(503) 223-8254 FAX: (503) 222-0657
Principals: Ogden Beeman, Gregory L. Hartman, Margaret W. Johnson, Karl V. Krema, John J. Vlastelicia.
Activities: Civil engineering relating to ports, waterways and marine facilities. Port and marine facility planning, system assessments including capacity, land requirements, transportation infrastructure, port management and operations. Technical analysis for waterway development and dredging projects, hydraulic characteristics of waterways, flood plain determinations, channel design, dredging and disposal site planning, cost estimating, permitting, equipment selection.
Ownership: Privately-owned corporation

CHRIS BILLINGS & ASSOCIATES 9
4445 S.W. Barbur Blvd.
Portland, OR 97201-4047
(503) 228-0008
Principals: Chris Billings
Activities: Mechanical: Building mechanical systems including HVAC, refrigeration, solar, central heating and cooling systems; plumbing, site utilities, medical gases, pool, fountain, compressed air systems; fire protection systems; pneumatic, electric, electronic and computerized instrumentation and control systems. Consulting services include studies, conceptual layouts, materials and equipment selection, cost estimates, plans, specifications, project management, construction observation, value engineering, systems testing, checkout and startup, as-builts, operation and maintenance manuals, energy management programs, energy studies and computerized building energy simulations.
Ownership: Private-sole proprietorship

BOATWRIGHT ENGINEERING, INC. 9
2613-12th Street, S.E.
Salem, OR 97302-2154
(503) 363-9225
Principals: M.G. Boatwright, Jack Hills, Corbey Boatwright
Activities: Civil: Water systems, structures, sewage works, streets, suburban development, municipal works, feasibility studies, sanitary landfills, industrial waste, facility plan studies.
Ownership: Privately-owned corporation

BRAUN, LTD 3
134 SE Fifth Avenue, Suite E
Hillsboro, OR 97123
(503) 648-2900, 640-5100 FAX: (503) 648-9316
or residence: 647-5500
Principals: F.W. "Bill" Braun
Activities: Chemical/Mechanical: project management, process design engineering, general engineering services, bio-mass fueled steam generators, electric power generation, services forest product manufacturing industry, gas turbines, hot oil heating system, saw mills and related industry.
Ownership: Limited partnership

BREEDLOVE, McCONNELL, GRANNING, PEASE ENGINEERS, INC. 7
19 N.W. 5th Avenue
Portland, OR 97209-3819
(503) 222-6886 Fax: (503) 222-1859
Branch Office
805 Liberty St., NE
Salem, OR 97301
(503) 399-1399 FAX: (503) 399-8259
Principals: Elden E. Breedlove, Delmar L. McConnell, Ray M. Granning, William R. Pease
Activities: Structural Design Consultants: concrete, steel, masonry and wood structures. Commercial, institutional, public and industrial buildings. Complete planning and design for commercial, industrial and recreational projects. Engineering investigation, evaluation, estimating, feasibility, quality survey, cost control, scheduling, inspection. Fabrication and erection drawings and procedures. Complete engineering computer facilities. Construction advisement and construction methods.
Ownership: Privately-owned corporation

BROWN AND CALDWELL 44
2300 Oakmont Way, Suite 100
Eugene, OR 97401-5556
(503) 686-9915
Branch Office:
9620 SW Barbur Blvd., Suite 200
Portland, OR 97219
(503) 244-7005
Other Offices:
Seattle, WA; Pleasant Hill, CA; Pasadena, CA; Sacramento, CA; Tucson, AZ; Denver, CO; Dallas-Fort Worth, TX; Atlanta, GA
Principals: Terry C. Gould, Bill R. Meloy, Charles Zickefoose, Walter J. Meyer, Steven J. Krugel, Kenneth J. Hopkins, Loran K. Anderson, Robert M. Allender
Activities: Water supply and treatment; wastewater collection, treatment and disposal; municipal engineering services; building structural, mechanical and electrical systems; commercial, industrial and institutional energy management; regional planning; rate studies; solid and hazardous waste management; construction management.
Ownership: Privately-owned corporation
Branch Office of Brown and Caldwell, Pleasant Hill, California

W. BROWN ENGINEERING 1
15010 S.E. McLoughlin Blvd.
Portland, OR 97222-8650
(503) 654-8232
Principals: Wayne L. Brown
Activities: Structural; structural analysis and design for commercial and industrial structures. Support systems for industrial machinery. Design for lumber mill and pulp mills. Planning, analysis and design for churches and schools. Foundation engineering for pre-engineered buildings. Construction troubleshooting investigations and repair design.
Ownership: Private-sole proprietorship

CARL H. BUTTKE, INC. CONSULTING TRANSPORTATION ENGINEER 1
P.O. Box 636
Portland, OR 97207-0636
(503) 223-4728
Principals: Carl H. Buttke
Activities: Traffic and Transportation Engineering. Development of plans for traffic circulation systems, analysis of access and traffic impact of land development projects, planning and analysis of public transportation systems, planning and analysis of parking systems and internal circulation, conduct traffic surveys, count programs and traffic forecasting, vehicular, pedestrian and bicycle safety analyses. Development of microcomputer software.
Ownership: Private-owned corporation.

STANLEY CARLSON ASSOCIATES CONSULTING ENGINEERS 3
543 Third Street, Building A, Suite 2
Lake Oswego, OR 97034-3056
(503) 635-3414
Principals: Stanley Carlson
Activities: Structural: Design, consultation and investigation of new or existing commercial, institutional, industrial and residential structures.
Ownership: Private-sole prorietorship

CARROLL, HATCH & ASSOCIATES 3
P.O. Box 8583
Portland, OR 97207
(503) 292-1363 FAX: (503) 292-6914
Principals: John Vranizan
Activities: Mechanical/Electrical: Wood product industry plant design and modernization, industrial energy related activities of all type.
Ownership: Privately-owned corporation

CARSON, BEKOOY, GULICK & ASSOC., INC. 17
3220 S.W. 1st Avenue
Portland, OR 97201-4693
(503) 227-4405 FAX: (503) 248-0994
Principals: L. Carson, Rodger G. Bekooy, Robert W. Gulick
Activities: Mechanical: Heating, ventilating, air conditioning, refrigeration, piping, plumbing, fire protection sprinkler systems, site utilities, energy conservation analyses, mechanical system surveys, feasibility studies, central heating, cooling and power plants including full contract documents, studies and reports. Electrical: Building and street lighting, power, communications, security, fire detection, automation systems, energy conservation analyses, electrical system surveys, feasibility studies including contract documents, studies and reports.
Ownership: Privately-owned corporation

ELDEN W. CARTER, CONSULTING ENGINEER 3
7931 S.E. King Road, Suite 1
Portland, OR 97222-1195
(503) 775-1556
Principals: Elden W. Carter
Activities: Civil. Municipal Works: Water resource development, supply, storage and distribution. Municipal waste collection systems. Streets and drainage.
Ownership: Private-sole proprietorship

CH2M HILL (Corporate) 2788
(Oregon) 432
2300 N.W. Walnut Blvd. / P.O. Box 428
Corvallis, OR 97339-0428
(503) 752-4271
Branch Office
2020 S.W. Fourth Avenue, 2nd Floor
Portland, OR 97201-4953
(503) 224-9190
Principals: Sid S. Lasswell, Michael D. Kennedy, Donald J. Benson, Kenneth D. Bielman, John W. Filbert, Richard S. Ivey, Nofal W. Kasrawl, Richard Kuehn, S. Lamont Matthews, Harry H. Mejdell, Hans F. Neukomm, L. Gene Suhr, Otto Vydra, Joseph E. Worth.
Activities: Civil engineering, services including geotechnical engineering, laboratory services, transportation engineering, surveying and mapping, structural and architectural engineering and planning; industrial processes services including chemical processes, industrial reclamation, toxic and hazardous waste management and environmental sciences; industrial and energy systems services including mechanical engineering, instrumentation and control, electrical engineering, electric utilities and hydropower engineering; water and wastewater services including water supply and treatment, wastewater collection, wastewater reclamation, and environmental laboratory services; and construction management.
Ownership: Privately-owned corporation

COLUMBIA CONSULTING ENGINEERS, INC. 8
P.O. Box 40088
Portland, OR 97240-0088
(503) 243-2850
Principals: Keith W. McIntyre, Sidney D. Nielsen
Activities: Electrical engineering. Power system design and analysis for commercial, industrial and academic facilities; lighting design, fire alarm and fireman's communications systems; hospital electrical design, including monitoring and nurse call systems, control design and wiring; cost estimating; energy and feasibility studies; illumination measurement, calculation and studies.
Ownership: Privately-owned corporation

COLUMBIA ENGINEERING INTERNATIONAL, INC. 7
2645 Willamette
Eugene, OR 97405-3182
(503) 342-3656 FAX: (503) 342-8227
Principals: Robert E. Silvis, Jr.
Activities: Particle board, medium-density fiber board, oriented strand board and wafer board plants; feasibility studies, complete plant design.
Ownership: Privately-owned corporation

COOPER CONSULTANTS, INC. 56
11675 S.W. 66th Avenue
Portland, OR 97223-8531
(503) 639-4914
Principals: Fredrick C. Cooper, Paul F. Ehinger, Jr., Thomas R. Hawkins, Donald J. Kliewer, William D. Lloyd, James R. Sheetz
Activities: Civil, environmental, municipal, and transportation engineering; solid/hazardous waste management; surveying; and construction management services throughout the Western United States. American Indian-owned with numerous local MBE certifications.
Ownership: Privately-owned corporation

CORNFORTH CONSULTANTS, INC. 11
7440 S.W. Hunziker Road
Portland, OR 97223-8243
(503) 684-3201
Principals: Derek H. Cornforth, Ermel Quevedo
Activities: Geotechnical engineering and geology. Practice has emphasis on: Landslides - analysis and corrective treatment through Landslide Technology Division. Earth dams - design, dam safety review, liquefaction and earthquake engineering. Legal - causation of soil failures, expert testimony, construction-related claims. Engineering geology - mapping, fault studies, seismology, hydrogeology.
Ownership: Privately-owned corporation

JAMES CROM, P.E., CONSULTING ENGINEER 1
17749 S.W. Leafy Lane
Lake Oswego, OR 97034-6931
(503) 636-5176
Principals: James A. Crom
Activities: Practical application of specialized civil-sanitary engineering expertise.
Ownership: Private-sole proprietorship

CROW ENGINEERING COMPANY 6
9040 S.W. Burnham Street
Portland, OR 97223-0206
Mailing Address:
P.O. Box 23176
Portland, OR 97223-2308
(503) 639-8404 FAX: (503) 684-5046
Principals: Gerald W. Crow
Activities: Plant layout and design for the forest products industry, lumber sorting and handling systems, planing mills, small log mills, machine design, mechanical stress grading of lumber.
Ownership: Privately-owned corporation

CRS SIRRINE, INC. 9
4380 S.W. MacAdam Avenue, Suite 250
Portland, OR 97201-4222
(503) 274-6277
Principals: Robert W. Vivian
Activities: Civil: Water supply, distribution and treatment, sanitary and storm sewer systems, wastewater treatment, drainage and flood control, tunneling; hydroelectric power. Industrial: Site selection and planning, detail design and construction management for: pulp & paper, wastewater treatment, power generation, microelectronics. Transportation: Airports, highways and streets, port development, traffic engineering, mass transit, railroads. Structural: Buildings, bridges, docks, reservoirs. Other: Estimating and scheduling, claims, construction program management, construction, urban planning, project financing.
Other Offices: Anchorage, AK; Phoenix, AZ; Irvine, CA; Los Angeles, CA; Sacramento, CA; Denver, CO; Washington, D.C.; Atlanta, GA; Chicago, IL; Baltimore, MD; New York City, NY; Research Triangle Park, NC; Greenville, SC; Dallas, TX; Houston, TX; Hong Kong
Ownership: Privately-owned corporation

RALPH S. CRUMME & ASSOCIATES 1
670 Glenwood Drive
Ashland, OR 97520-3230
(503) 482-9118
Principals: Ralph S. Crumme
Activities: Industrial engineering - materials handling - plant layout - conveyor systems feasibility studies.
Ownership: Private-sole proprietorship

CUNNINGHAM ASSOCIATES 3
9401 S.E. McLoughlin Blvd.
Milwaukie, OR 97222-7493
(503) 653-0753
Principals: James L. Helton, Henry S. Burdin, Robert D. Kennedy
Activities: Civil: Planning, investigation, feasibility, design and construction observation in the following areas: Water Supply: Wells, dams, storage reservoirs, filtration and treatment plants, pumping stations, transmission lines, distribution systems. Sewerage: Collection systems, pumping stations, treatment facilities. Drainage and flood control: drainage studies, storm sewers, levees, pumping stations, channel improvements. Misc. Projects: Roads, streets, airports, docks, engineering reports, valuations.
Ownership: Privately-owned corporation

CURRAN - McLEOD, INC. 3
7460 S.W. Hunziker Road
Portland, OR 97223-8244
(503) 684-3478
Principals: Patrick D. Curran, Curt J.McLeod
Activities: Civil, sanitary, hydrology.
Ownership: Privately-owned corporation

DAMES & MOORE 15
1220 S.W. Morrison Street
Portland, OR 97205-2260
(503) 228-7688 FAX: (503) 223-6083
Principals: John P. Martin, James W. Johnson
Activities: Geotechnical engineering, environmental sciences, remediation of soil/groundwater contamination, seismology, rock mechanics.
Ownership: A professional limited partnership
Branch Office of Dames & Moore, Los Angeles, California

DARDEN ENGINEERING, INC. 1
915 N.E. 23rd Avenue
Portland, OR 97232-2220
(503) 234-2725
Principals: William R. Darden
Activities: Mechanical. Facilities engineering for electronics manufacturing, pulp and paper, process industries, heavy industrial manufacturing and forest products. Experienced in cogeneration and energy related studies.
Ownership: Privately-owned corporation

DE HAAS & ASSOCIATES, INC. 8
9450 S.W. Commerce Circle
Wilsonville, OR 97070-9614
(503) 682-2450
Principals: Marlin De Haas
Activities: Civil engineering: Muncipal engineering and studies. Street, storm drainage, sanitary, sewer and water improvements. Planning and design of subdivisions and land development, including permitting. Surveying: Boundary, design, construction and hydrographic surveys. Topographic and mapping surveys. Construction staking.
Ownership: Privately-owned corporation

DESIGN EDGE SERVICES, INC. 2
4520 S.E. Belmont, Suite 330
Portland, OR 97215
(503) 238-1112 FAX: (503) 238-1830
Principals: Robert Kirkpatrick, Joel K. Dean
Activities: Structural engineering and planning for new, rennovated, and modernized commercial, manufacturing, bulk commodity, and institutional facilities. Design of craneways; conveying and process equipment support structures; foundation systems; and retaining walls. Structural evaluations and mathematical analysis.
Ownership: Privately-owned corporation

DHILLON ENGINEERS, INC. 15
4504 S.W. Corbett Avenue
Portland, OR 97201-6501
(503) 228-2877 FAX: (503) 228-3660
Principals: B.S. Dhillon
Activities: Electrical/Mechanical: engineering and design for commercial, institutional, industrial municipal, utility and governmental facilities. Specializing in industrial power distribution and controls, OH/UG distribution systems, HV, EHV substations, generation, wastewater treatment, pulp and paper facilities. Heating, ventilation, air conditioning, plumbing, refrigeration, energy conservation and fire protection.
Ownership: Privately-owned corporation

DJ ASSOCIATES 1
7320 S.W. Beaverton-Hillsdale Hwy. #119
Portland, OR 97225-2149
(503) 292-1965
Principals: Denny G. Jhaveri
Activities: Mechanical-HVAC: Boiler plants, heating, air conditioning, refrigeration, cold storages, process exhaust, process piping, plumbing, fire protection, energy studies and audits; design, specification, cost estimates, O & M manuals, value engineering, construction supervision, project management for commercial, industrial, Hi Tech, clean rooms, institutional, schools, hospitals, public and governmental buildings.
Ownership: Private-sole proprietorship

ANTON DRESDEN - CONSULTING ENGINEER 1
2430 S.W. Summit Court
Lake Oswego, OR 97034-3622
(503) 636-1888
Principals: Anton Dresden
Activities: Consultation, design and specification for special machinery, tools and products, and for industrial processes, systems, production, and materials handling projects. Plant layout, cost reduction systems and procedures.
Ownership: Private-sole proprietorship

ALBERT G. DUBLE, P.E., ACOUSTICAL ENGR. 1
16765 N.E. Kings Grade Rd.
Newberg, OR 97132-9803
(503) 538-8044 or 244-8134
Principals: Albert G. Duble
Activities: Acoustical consulting engineering for architectural acoustics, HVAC noise control, environmental noise, industrial noise and sound reinforcement systems design.
Ownership: Private-sole proprietorship

DICK W. EBELING, INC. 4
10150 S.W. Nimbus Avenue, Suite E2
Portland, OR 97223-4306
(503) 639-6601
Principals: Dick W. Ebeling, John F. Bradford
Activities: Structural analysis and design of industrial, commercial, educational, residential and religious buildings, timber bridges, towers, tanks, equipment/supports and foundations. Specialize in the design of heavy timber structures and cold storage warehouses. Area of operations - Oregon, Washington, California, Alaska, Arizona, Nevada, Colorado, Hawaii, New Mexico, Utah, Montana, Texas, Wisconsin, Tennessee, Iowa, Pennsylvania, North Carolina and Florida.
Ownership: Privately-owned corporation

ELCON ASSOCIATES, INC. 19
12670 N.W. Barnes Road
Portland, OR 97229
(503) 644-2490 FAX: (503) 644-2911
Principals: Inder K. Chawla, Roger C. Young, Kinh Pham
Activities: Electrical mechanical: consulting, planning, design, studies and manuals, power systems, control systems, generation, substations, industrial systems, economic analysis. Feasibility studies, computer systems. Heating, air conditioning, plumbing, fire protection, process piping, energy studies.
Ownership: Privately-owned corporation

EMERSON, PARKER C. & ASSOCIATES 1
17935 Cardinal Drive
Lake Oswego, OR 97034-6699
(503) 638-7286
Principals: Parker C. Emerson
Activities: Naval architecture, marine engineering and marine surveying including economic feasibility, inter-relationship between marine vessels and their functional usage. Conceptual design, contract plans and specifications for all systems. Construction administration for placement of vessels into operation. Engineering for vessels of all sizes and types, for new construction, repair and conversion. Marine surveys, stability and stress analysis. Licensed engineers in California, Hawaii and Oregon.
Ownership: Private-sole proprietorship

ETS PACIFIC, INC. 8
3030 SW Moody Avenue
Portland, OR 97201
(503) 222-5840 FAX: (503) 222-6525
Principals: Frank Butchart, George Battermann, Andrew McCann, Rick Brovelli, Charles Gary Peterson
Activities: Railway Transportation: in-plant trackage, port facilities, rehabilitation services, route analysis, bulk loading and unloading. Industrial Facilities: physical plant and plan systems; plant layout; material handling; rennovations, remodels, new facilities. Forest Products: plywood plant layout and design; wood residue processing and handling. Commercial and Industrial HVAC, exhaust, plumbing, piping, fire protection. Structural: industrial, commercial, public works buildings and structures, machinery foundations, contractor services, rennovations and remodels, investigations and reports.
Ownership: Privately-owned corporation

D.W. FRITZ, CONSULTING ENGINEERS, INC. 1
4500 SW Kruse Way, Suite 150
Lake Oswego, OR 97035-2562
(503) 635-6606 FAX: (503) 636-6575
Principals: Dennis W. Fritz
Activities: Machine design and development: special machinery design for mechanization and automation; prototype design and testing; laboratory test equipment design; production machinery improvement; engineering analysis for product and profit improvement.
Ownership: Privately-owned corporation

FUJITANI HILTS & ASSOCIATES, INC. 9
2255 S.W. Canyon Road
Portland, OR 97201-2498
(503) 223-6147 FAX: (503) 228-4065
Principals: David E. Hilts, K. Frank Fujitani, Nancy J. Fargo
Activities: Engineering studies, investigations, reports and expert consultation in the field of soil mechanics, geohydrology, geology and foundation engineering as applied to earth dams, structure foundations, airports and highways, embankments, earth fills, and environmental issues. Laboratory tests, field tests, instrumentation, soil and rock dynamics.
Ownership: Privately-owned corporation

GEOTECHNICAL RESOURCES, INC. 14
7412 S.W. Beaverton-Hillsdale Highway
Portland, OR 97225-2162
(503) 292-2621 FAX: (503) 297-1696
Principals: David D. Driscoll, H. Stanley Kelsay, Dwight J. Hardin
Activities: Foundation engineering, soil mechanics, soil and groundwater contamination studies, groundwater studies, engineering geology, rock mechanics, instrumentation and in-situ testing specialists.
Ownership: Privately-owned corporation

GLUMAC & ASSOCIATES, INC. 11
920 S.W. Third Avenue, Suite 200
Portland, OR 97204-2418
(503) 227-5280
Principals: Edward M. Kirchner, Steven A. Straus
Activities: Mechanical/Electrical/Acoustical.
Ownership: Privately-owned corporation
Branch Office of Glumac & Associates, San Francisco, California

JAMES D. GRAHAM & ASSOCIATES, INC. 5
2828 S.W. Corbett, Suite 221
Portland, OR 97201-4827
(503) 241-1993
Principals: James D. Graham
Activities: Electrical: Commerical and industrial electrical design. Lighting, power distribution, communication and fire detection systems, control wiring, cost estimating, energy and feasibility studies, investigations and reports.
Ownership: Privately-owned corporation

SPENCER B. GROSS, INC. 7
13545 N.W. Science Park Drive
Portland, OR 97229-5457
(503) 646-1733 FAX: (503) 626-4818
Principals: Spencer B. Gross, George F. Gross
Activities: Topographic, planimetric, orthophoto and digital mapping. City, suburban and highway engineering maps; plan profile and capacity area maps. Computer applications: Aero-triangulation, digitizing, areas and volumes from maps and aerial photos; photogrammetric cross sections and profiles; industrial applications, precision photo lab services, aerial photography and drafting.
Ownership: Privately-owned corporation

HANER, ROSS & SPORSEEN, INC. 4
15 S.E. 82nd Drive
Gladstone, OR 97027-2550
(503) 657-1384
Principals: J.H. Greenman
Activities: Civil: Municipal improvements, sewer and water systems, industrial waste treatment, valuation and rate studies, port facilities, industrial site development, hydro power development, dams, irrigation works, drainage. Structural: Bridges, buildings, waterfront structures.
Ownership: Privately-owned corporation

MEMBER FIRMS — EMPLOYEES

R.J. HILL ENGINEERING COMPANY — 3
2833 Siesta Lane
Eugene, OR 97402-9002
(503) 344-9116 FAX: (503) 342-5981
Principals: Robert J. Hill
Activities: General consulting practice, including industrial site planing, engineering reports and feasibility studies, operation analyses. Plant layout, design, construction project management for forest products industry - sawmills, planning mills, plywood and veneer plants, particle board plants, wood waste utilization systems, material handling. Food processing, meat packing and fish processing industry.
Ownership: Privately-owned corporation

HOLMES/ENTENMAN ENGINEERS, INC. — 2
1410 S.W. Morrison Street, #804
Portland, OR 97205-1291
(503) 226-1260
Principals: Samuel M. Holmes, Steven J. Entenman
Activities: Structural design for commercial, industrial and institutional buildings. Investigations and reports.
Ownership: Primary-owned corporation

F.W. HORSTKOTTE & ASSOCIATES — 4
621 S.W. Morrison, 523 American Building
Portland, OR 97205-3808
(503) 223-3014
Principals: F.W. Horstkotte, Jr.
Activities: Manufacturing plants and equipment for the forest products industry, sawmills, plywood, chipping plants and all allied facilities.
Ownership: Privately-owned corporation

INTERFACE ENGINEERING, INC. — 33
6542 S.E. Lake Road
Milwaukie, OR 97222-2138
(503) 659-6394 FAX: (503) 659-9029
Principals: Kenneth L. Mehlig, Donald C. Pfaff, Douglas D. Shaw
Activities: Mechanical and electrical engineering consultants for commercial, industrial, institutional, educational, medical and lodging projects. HVAC, plumbing, fire protection, site utilities, lighting, power distribution, controls, heat recovery, studies and reports.
Ownership: Privately-owned corporation

JADE CONSULTANTS — 4
2123 SE 39th
Portland, OR 97214
(503) 230-9437
Principals: Boyd Davison, Gayle Davison
Acitivites: Civil and sanitary engineering - Water supply, distribution and storage; Wastewater collection, pumping and treatment; Stormwater management and flood control; Irrigation; Highway and street design; Light rail facilities. Ancillary Services - Construction management and inspection; Value engineering; Videotaping of site conditions.
Ownership: Privately-owned partnership

JGL ACOUSTICS, INC. — 1
5354 Highland Drive
Bellevue, WA 98006-4216
(206) 747-2229
Principals: Jerry G. Lilly
Activities: Acoustical - Sound and vibration control in buildings with special emphasis on HVAC, electrical and elevator systems; community noise assessment; industrial noise and vibration control.
Ownership: Privately-owned corporation

JOHNSTON, T.L. & ASSOCIATES — 1
3430 N.E. 41st Avenue
Portland, OR 97212-1914
(503) 282-4118
Principals: Thomas L. Johnston
Activities: Industrial plants, stationary and marine power plants, piping systems, pulp and paper mills, lime plants.
Ownership: Private-sole proprietorship

MEMBER FIRMS — EMPLOYEES

KPFF CONSULTING ENGINEERS — 41
421 S.W. Sixth Avenue, Suite 911
Portland, OR 97204-1690
(503) 227-3251 FAX: (503) 274-8029
Principals: Arthur W. Johnson, Grant L. Davis,Stu Cato
Activities: Structural engineering for low, mid and high-rise, commercial, public buildings, industrial facilities and bridges; civil engineering for site development, utilities and streets.
Ownership: Privately-owned corporation

KAMPE ASSOCIATES, INC. — 11
15962 S.W. Boones Ferry Road
Lake Oswego, OR 97034-4351
(503) 635-6291
Principals: Ronald C. Kampe
Activities: Civil Engineering/Land Surveying for municipal, industrial, commercial, residential and recreational projects: Site evaluation, layout and feasibility studies; street, road and railroad design; storm drainage, sanitary sewer and water system design; earthwork and grading design; industrial, log and material-handling yards; construction representation and observations; boundary, topographic and location surveying and mapping; subdivisions and land development; platting; construction layout and staking; facility commissioning, check-out and start-up planning.
Ownership: Privately-owned corporation

KEECH ASSOCIATES, INC. — 1
1990 N.W. 119th
Portland, OR 97229-4912
(503) 641-6333
Principals: Robert Keech
Activities: Traffic and highway engineering; traffic signal design and contract administration. Traffic control layout; traffic operations and management studies; solid waste haul, collection and transfer studies; traffic impact assessment for new developments.
Ownership: Privately-owned corporation

KEI-KRUCHEK, ENGINEERS, INC. — 7
One Columbia River, Suite 200
Vancouver, WA 98660
(503) 283-2388, (206) 696-2486 FAX: (206) 695-1397
Principals: William McNeal, William Gunning
Activities: Consulting mechanical engineering of facilities for industrial, commercial, educational and public buildings; energy management, air conditioning, refrigeration, heating, ventilating, plumbing, site utilties, fire protection, water supply and sewage disposal systems; process piping, and engineering studies and reports on above systems. Value engineering and energy audits, technical assistance and conservation studies. Hydraulic calculation of fire sprinkler systems by computer.
Ownership: Privately-owned corporation

KELLY/STRAZER ASSOCIATES, INC. — 11
2510 SW First Avenue
Portland, OR 97201
(503) 222-2820
Principals: Patrick B. Kelly, Robert J. Strazer
Activities: Soils engineering and engineering geology to develop recommendations for site selection, planning, engineering and environmental projects. Services include reconnaissance surveys, environmental audits, subsurface investigations, soil mechanics and foundation engineering, soil dynamics, pavement analyses, laboratory testing, and construction observation and testing. Representative projects include bridges, dams and embankments, subsurface drainage, earthwork, erosion control, temporary and permanent retaining structures, footing and pile foundations, industrial-commercial-roadway pavements, industrial facilities, institutional and commercial buildings.
Ownership: Privately-owned corporation

MEMBER FIRMS — EMPLOYEES

KITTELSON & ASSOCIATES, INC. — 4
512 S.W. Broadway
Portland, OR 97205-3443
(503) 228-5230 FAX: (503) 228-5230
Principals: Wayne Kittelson, Gary Katsion
Activities: Traffic and transportation engineering (Civil).
Ownership: Privately-owned corporation

KLEIN CONSULTING ENGINEERS, INC. — 2
1928 Council Street
Forest Grove, OR 97116-2387
(503) 359-5956
Principals: Andrew M. Klein
Activities: Civil, Sanitary: Sanitary and civil engineers, studies, reports, master planning and designs for water, sewage, drainage, streets, dams, utilities, subdivisions and land use. Water resource and pollution abatement studies. Rate studies.
Ownership: Privately-owned corporation

KNUDSON ENGINEERS, INC. — 5
7110 S.W. Fir Loop / P.O. Box 23788
Portland, OR 97223-8005
(503) 620-7675
Principals: Ervin C. Knudson
Activities: Electrical power and control system engineering including power generation and distribution, substation design, plant power and lighting, process instrumentation, telemetry and communication, real-time data acquisition; industrial process and machine control, plant automation, energy management. Studies, design, construction services, start-up assistance, hands-on electrical performance testing and troubleshooting, application software design, programming and implementation.
Ownership: Privately-owned corporation

KRAMER, CHIN & MAYO, INC. — 12
7110 S.W. Fir Loop
Portland, OR 97223-8022
(503) 684-9097
Principals: Stephen C. Wagner
Activities: *Civil:* Sanitary: planning, collection, pumping, treatment. *Drainage:* planning, design, financing, flood control. *Water:* planning, supply, distribution, storage, treatment. *Transportation:* planning, road and street design, vehicle maintenance facilities. Tunneling. Environmental. *Structural:* buildings, bridges, docks reservoirs. Value engineering, construction management, municipal master planning, project financing, mechanical engineering. *Applied Sciences:* hatcheries and aquaculture, lake restoration.
Ownership: Privately-owned corporation
Branch Office of Kramer, Chin & Mayo, Inc., Seattle, Washington

KRAMER-GEHLEN & ASSOCIATES, INC. — 17
400 Columbia Street, Suite 240
Vancouver, WA 98660-3117
(206) 693-1621; (503) 289-2661
Principals: Joseph C. Gehlen, Eric M. Hayford
Activities: Structural engineering, structural designing and documents for commercial, industrial and institutional structures and bridges, consultation and reports. Specialties: post-tensioned concrete and seismic evaluations.
Ownership: Privately-owned corporation

MEMBER FIRMS — EMPLOYEES

LEE ENGINEERING, INC. — 10
1300 John Adams Street
Oregon City, OR 97045-1631
(503) 655-1342 FAX: (503) 655-1360
Principals: F. Duane. Lee, David A. Lee, James G. Smith
Activities: Civil: Municipal and special district public works engineering, water systems, pumping stations, wells, reservoirs, water treatment systems, sewers, sewage treatment facilties, reports, drainage works, irrigation systems, roads and streets, swimming pools, parks and recreation facilities. Industrial and hazardous waste, environmental studies, rate analysis. Structural: commercial and industrial buildings, pulp and paper mills, highway structures, bridges, docks, reservoirs and hydraulic structures. Surveying: Site, topographic, land and boundary, construction, legal descriptions.
Ownership: Privately-owned corporation

JIM LUNDERVOLD ENGINEERS, INC. — 3
8040 N.E. Sandy Blvd., Suite 201
Portland, OR 97213-7153
(503) 284-6375
Principals: Jim E. Lundervold
Activities: Structural. Consulting and design, investigations and plan review for all types of commercial, industrial and residential buildings and related structures. Licensed: Oregon, Washington, California, Nevada, Arizona, Colorado, Nebraska.
Ownership: Privately-owned corporation

MFIA, INC. — 15
2007 S.E. Ash Street
Portland, OR 97214-1664
(503) 234-0548 FAX: (503) 234-0677
Principals: W.B. Morrison, Tai Funatake, Robert K. Inouye, John A. vanBladeren
Activities: Mechanical, electrical design of commercial, institutional and governmental projects. Central heating-cooling plants, plumbing, heating, ventilating, air conditioning, controls, fire protection, process connections, security systems, lighting, power, communications, site utilities, feasibility studies, energy evaluation and conservation studies, solar analysis and design.
Ownership: Privately-owned corporation

JOHN McDONALD ENGINEERING — 1
10116 S.E. Stanley Avenue
Portland, OR 97222-4351
(503) 774-0077
Principals: John K. McDonald
Activities: Soils-civil; foundation analysis, soil testing, geotechnical-geophysical work at remote or inaccessible sites, earthwork construction control, and ground-penetrating radar service for delineating rebars in concrete or buried geologic features.
Ownership: Private-sole proprietorship

MANAGEMENT ENGINEERING ASSOCIATES — 1
21904 S.E. 42nd Street
Camas, WA 98607-9343
(206) 834-3004
Principals: William S. Ward
Activities: Industrial, mechanical, manufacturing, automation, health care, project management, computer.
Ownership: Private-sole proprietorship

MANFULL• CURTIS, INC. 14
10700 S.W. Beaverton Highway, Suite 315
Beaverton, OR 97005-3008
(503) 643-6761 FAX: (503) 646-5512
Principals: Robert G. Manfull, Alan B. Curtis
Activities: Consulting engineers for building environmental systems including air conditioning, heating, ventilating, plumbing, fire protection; central heating, cooling plants; instrumentation and control systems; process piping and exhaust systems for industry; energy conservation studies and mechanical system improvements.
Ownership: Privately-owned corporation

MATER ENGINEERING, LTD. 10
101 S.W. Western Blvd. / P.O. Box O
Corvallis, OR 97339-0880
(503) 753-7335 FAX: (503) 752-2952
Principals: Milton M. Mater, M. Scott Mater, Jean Mater, Catherine M. Mater
Activities: Mechanical, civil, industrial, project management.
Ownership: Privately-owned corporation

MEI-CHARLTON, INC. 20
2233 S.W. Canyon Road
Portland, OR 97201-2499
(503) 228-9663
Principals: D.G. Chakrapani, Ralph Hudson
Activities: Staff: engineers, metallurgists, chemists, physicists (laboratory and field). Materials: processes; specifications; pilot plants; quality assurance; corrosion; wear; aging; fracture; fit for purpose plant/equipment, boilers, pressure vessels evaluations; chemical problem solving; fires and explosions. Environmental; pollution; combustion; water; air; hazardous wastes; scanning electron microscopy. Industrial; mechanical; product and equipment design; prototype evaluation; materials handling; transportation equipment; failure investigation; test and control devices. Computerized stress and data acquisition.
Ownership: Privately-owned corporation

MEIGS, GILBERT R., CONSULTING ENGINEER 1
3030 SW Moody Avenue, Suite 103
Portland, OR 97201
(503) 223-3033 FAX: (503) 221-1880
Principals: Gilbert R. Meigs
Activities: Civil: Hydraulics, water supply and distribution, pumping and power.
Ownership: Private-sole proprietorship

ROBERT E. MEYER CONSULTANTS 12
4805 S.W. Griffith Drive
Beaverton, OR 97005-2986
(503) 643-7531
Principals: Robert E. Meyer, David Sandstrom, Roger Superneau
Activities: Planning, reports, investigations and utility rate studies. Design and contract administration in the fields of water supply, storage, pumping, purification, softening and distribution; sanitary sewage treatment, collection and pumping; industrial wastes; storm drainage; highways and streets; environmental engineering and recreational facilities. Site developments, mapping and surveying. Also, hydrologic and hydraulic engineering, basin planning, flood control, water quality, mathematical modeling and fisheries in-stream flow data processing. Building design. Landscape design including parks and campgrounds.
Ownership: Privately-owned corporation

MILES, THOMAS R. 2
5475 S.W. Arrowwood Lane
Portland, OR 97225-1323
(503) 292-0107 or 292-2919
Principals: Thomas R. Miles
Activities: Mechanical, industrial: design and development of industrial manufacturing and production facilities, methods, machinery, controls, materials handling, biomass conversion and combustion equipment and energy utilization. Particularly serving forest products, products manufacturing, agriculture, food, biomass energy resources and conversion, gasification.
Ownership: Private-sole proprietorship

R.T. MILLER ENGINEERING, INC. 7
208 S.W. Stark, 309 Concord Building
Portland, OR 97204-2610
(503) 248-1955 FAX: (503) 248-0905
Principals: Raymond T. Miller, Gregory E. Gardner
Activities: Structural engineering: consultation, design, analysis, investigation and review of commercial, industrial, religious, educational, medical, recreational, residential buildings, foundations, modular structures, retaining wall and vibrations. Repair and renovation of existing and historical structures. Licenses - Oregon, Washington, California, Alaska, Idaho, Utah, Nevada, Montana, Wyoming, Arizona, New Mexico, Colorado, Hawaii.
Ownership: Privately-owned corporation

MOFFATT, NICHOL & BONNEY, INC. 17
1845 N.E. Couch Street
Portland, OR 97232-3087
(503) 232-2117
Principals: Robert M. Bonney, Robert A. Bonney
Activities: Structural and civil engineering investigations, reports, design and construction observation for all types of commercial and industrial buildings, bridges, waterfront structures, stadiums, highways, airports and utilities.
Ownership: Privately-owned corporation

ELDO R. MURPHY & ASSOCIATES 1
1010 Oak Hill Avenue, S.E.
Salem, OR 97302-3438
(503) 363-0385
Principals: Eldo R. Murphy
Activities: Electrical. Power, illumination, control and communication design for commercial, industrial and institutional buildings. Water and sewer pumping, treatment and control electrical design, engine/generator specifications and site power distribution.
Ownership: Privately-sole proprietorship

MURRAY, SMITH & ASSOCIATES, INC. 9
121 S.W. Salmon, Suite 1110
Portland, OR 97204-2920
(503) 225-9010
Principals: Harold R. Murray, Philip H. Smith
Activities: Civil Engineering: Planning, design, construction services, investigations, reports, financial and rate analysis. Planning: Master planning for utilities, storm water and drainage, sewerage, industrial wastes, water supply, site development, financial needs, environmental studies, and public facilities elements of comprehensive plans. Design: Preliminary and final design in all fields of civil engineering which involve pipelines, structures, pumping, water and waste treatment, parking lots, streets, marinas, tunnels, submarine pipelines, earthwork, dams, dikes and canals. Investigations and Reports: Special investigations in fields of expertise with written reports or testimony for use in planning or in resolution of problems. Construction Services: Complete services for observation of construction and construction management including resident personnel, program financial advice and scheduling. Financial and Rate Analysis: Rate analysis for utility systems and financial program development or review.
Ownership: Privately-owned corporation

OBEC CONSULTING ENGINEERS 22
244 Country Club Road
Eugene, OR 97401-2299
(503) 683-6090
Principals: W.A. Palmateer, Wm. H. Hall
Activities: Bridges, foundations. Underwater inspections, structural investigations and reports. Tunnels, reservoirs, roads and streets, water and sewer, construction engineering and inspection, project management.
Ownership: Privately-owned corporation

OREGON TECHNICAL SERVICES CENTER, INC. 1
2245 S.W. Canyon Road
Portland, OR 97201-2499
(503) 292-9663 FAX: (503) 228-4065
Principals: Harry Czyzewski
Activities: Metallurgical; mechanical; senior consultation, Investigation, Reports.
Ownership: Privately-owned corporation

PAE CONSULTING ENGINEERS, INC. 32
808 SW Third Avenue, Suite 300
Portland, OR 97204-2624
(503) 226-2921 FAX: (503) 226-2930
Principals: Carl L. Urben, Richard W. Burgess, Robert A. Sulek, Paul J. Du Pont, Larry R. Sturtz.
Activities: Mechanical/Electrical/Energy Management/ Lighting Design: heating, air conditioning, plumbing, controls, fire protection, process connections, energy evaluation and management, security systems, lighting design and selection, specialty lighting, site lighting, power and communication systems for commercial, high technology, institutional, and government projects.
Ownership: Privately-owned corporation

PALMER, JERRY, CONSULTING ENGINEER 1
1750 SW Skyline Blvd., Suite 19
Portland, OR 97224
(503) 297-1458
Principals: Jerry M. Palmer
Activities: Providing engineer, development services and surveying to private business, and government agencies involved in land development and construction of public improvements.
Ownership: Privately-owned corporation

PAVEMENT SERVICES, INC. 2
2510 SW First Avenue
Portland, OR 97201
(503) 227-7630
Principals: Arthur M. Furber, Jr.
Activities: Civil: specializing in pavement engineering. Services offered include: pavement evaluation and design, pavement management system implementation, traffic loading analysis, Falling Weight Deflectometer and resilient modulus testing.
Ownership: Privately-owned corporation

PEASE & BEADLING ENGINEERS, INC. 6
0112 S.W. Pennoyer Street
Portland, OR 97201-4368
(503) 221-1484 FAX: (503) 227-7759
Principals: Charles E. Pease, David R. Beadling
Activities: Civil, industrial and structural engineering; design, planning, feasibility studies, project management, operational studies, investigations and reports for forest products plants, commercial and industrial facilities; site development, waterfront facilities, manufacturing plants, materials handling systems, buildings, bridges, towers, docks, utilities structures, foundations.
Ownership: Privately-owned corporation

PERKINS ENGINEERING, INC. 6
P.O. Box 19163
Portland, OR 97219-0163
(503) 246-6311 FAX: (503) 244-5730
Principals: Louis M. Perkins
Activities: Electrical engineering for industrial, commercial, municipal and small hydro projects. Services include studies, budget estimates, preparation of plans and specifications, computer aided drafting and design (CAD). Special consulting is provided in areas of electrical power system surveys, protection and coordination, energy conservation, process control design, application of programmable control.
Ownership: Privately-owned corporation

PERRY ENGINEERING 1
3110 Douglas Circle
Lake Oswego, OR 97034-3551
(503) 636-8969
Principals: Richard Perry
Activities: Structural: Residential, industrial and commercial buildings; bridges, docks and foundations; concrete forms, shoring and form handling equipment. Investigations, reports and design.
Ownership: Private-sole proprietorship

R & W ENGINEERING, INC. 13
6415 S.W. Canyon Court, Suite 100
Portland, OR 97221-1484
(503) 297-5676 FAX: (503) 297-8376
Principals: Harry C. Reeder, Mark C. Wirfs, Donald L. Evans, Gregg, H. Scholz, Timothy A. Shanahan
Activities: Electrical, mechanical and acoustical - HVAC, plumbing, process piping systems, Hi Tech clean rooms, power and lighting, Hydro electric facilities, instrumentation and control, water and waste water systems, street and athletic field lighting.
Ownership: Privately-owned corporation

RESSEGER/GOTCHALL 2
2328 SE Washington Street
Milwaukie, OR 97222
(503) 659-5913
Principals: Robert B. Resseger, Gerald L. Gotchall
Activities: Structural-design and consultation for commercial and industrial buildings, schools, and other institutional buildings.
Ownership: Privately-owned partnership

RITTENHOUSE-ZEMAN & ASSOCIATES 17
7409 SW Tech Center Drive, Suite 135
Portland, OR 97223-8024
(503) 639-3400 FAX: (503) 620-7892
Principals: Terry N. Craven, Richard W. Rinne, James P. Kiser
Activities: Geotechnical Engineering: Site exploration, foundations, shoring, dams, streambank protection, instrumentation, seismic analysis, laboratory testing. Engineering Geology: Geologic mapping, airphoto interpretation, geologic hazards, geophysical surveys, field exploration and drilling, fault mapping. Hydrogeology: Local and regional ground water studies, ground water modeling and pollution evaluation, pump tests, aquifer analysis. Chemical Waste: Environmental audits, monitoring wells, mitigation measures, plume tracing, laboratory testing. Landslide: Identification and evaluation, field mapping, instrumentation, slope stability, stabilization, rock mechanics. Pavement: Condition surveys, deflection monitoring, pavement design, rehabilitation studies, construction monitoring.
Ownership: Privately-owned corporation
Branch office of Rittenhouse-Zeman & Associates, Bellevue, Washington

ROWLAND S. ROSÉ 1
19 N.W. 5th Avenue
Portland, OR 97209-3819
(503) 222-6886
Principals: Rowland S.Rosé
Activities: Structural engineering, reports, engineering investigation.
Ownership: Private-sole proprietorship

SRH ENVIRONMENTAL MANAGEMENT, INC. 16
12245 NE Whittaker Way
Portland, OR 97230
(503) 252-8316
Principals: John R. Spencer, John H. Ruddick, Ross R. Simmons
Activities: Hazardous waste management, environmental assessments and audits, industrial health management, regulatory affairs, air monitoring, groundwater investigations, hazardous waste remediation.
Ownership: Privately-owned corporation

SCHAUDT, STEMM & WILD, INC. 7
388 High Street
Eugene, OR 97401-2398
(503) 485-8383
Principals: Eugene H. Schaudt, Arthur M. Wild, Donn E. Stemm
Activities: Civil, structural, surveying, land planning.
Ownership: Privately-owned corporation

SMITH & MONROE & GRAY ENGINEERS, INC. 13
10700 S.W. Beaverton Highway
Beaverton, OR 97005-3005
(503) 643-8595
Principals: Robert G. Monroe, Rod Monroe
Activities: Structural, civil and material handling design for commercial and industrial facilities.
Ownership: Privately-owned corporation

L.R. SQUIER ASSOCIATES, INC. 9
4255 S.W. Oakridge Road / P.O. Box 1317
Lake Oswego, OR 97034-0530
(503) 635-4419 FAX: (503) 635-1430
Principals: Rad Squier, Arlan Rippe, Gary Peterson
Activities: Geotechnical engineering and related geosciences: engineering geology, rock mechanics, hydrogeology and hazardous-toxic waste. Studies for: Foundations, earthwork, landslides, earth dam evaluation and design, groundwater, soil/groundwater contamination, instrumentation, seismicity, environmental site assessment, and site selection.
Ownership: Privately-owned corporation

TALBOTT ENGINEERS, INC. 17
7 S.E. 97th Avenue
Portland, OR 97216-2498
(503) 256-3852 FAX: (503) 252-7806
Principals: John A. Talbott, Thomas R. Fries, Thomas D. Jones
Activities: Mechanical, metallurgical, civil, structural and automotive engineering, design, analysis, investigation and reports. Cableways, equipment, steam and gas, manufacturing processes and facilities, material handling, vehicles, product design, industrial plant planning, metals manufacturing, materials studies, utilities, roads, railroads, site development, structures, hydraulic works, failure analysis, pollution control, energy conservation analyses, accident investigations, metallography, microscopic studies, stress analysis.
Ownership: Privately-owned corporation

TENNESON ENGINEERING CORPORATION 10
409 Lincoln Street
The Dalles, OR 97058-1898
(503) 296-9177
Principals: Donald J. Branton, Vernon B. Tenneson, Donald J. Rhode, Daniel R. Meader, David L. Tuttle
Activities: Planning, municipal public works, street, water and sewage systems, industrial park development and waste treatment disposal systems, port site development, subdivision planning and development, surveying of all types, high order control, right-of-way, geodetic, small parcel. Hazardous waste site qualified.
Ownership: Privately-owned corporation

TRAPP, DAVID L. & ASSOCIATES 3
1235 Mt. Hood Avenue/ P. O. Box 561
Woodburn, OR 97071
(503) 981-3181 FAX: (503) 981-7934
Principals: David L. Trapp
Activities: Civil: planning, design and construction for surburban commercial and industrial developments; water supply, storage and distribution systems; sanitary and storm collection systems and street designs; underwater bridge inspections. Structural: commercial, industrial and agricultural buildings. CAD - computer aided drafting used in all aspects of design work.
Ownership: Private-sole proprietorship

TRY, ROBERT W., CONSULTING ENGINEER 1
Route 3 Box 291A
Sherwood, OR 97140-0291
(503) 625-5684 or 684-3334
Principals: Robert W. Try
Activities: Mechanical: lumber dry kilns, veneer dryers, boilers, cogeneration, wood fired systems, general sawmill and plywood mill design, feasibility studies and waste heat recovery systems.
Ownership: Private-sole proprietorship

URS CONSULTANTS 19
Lloyd 500 Building, 500 N.E. Multnomah Street
Portland, OR 97232-2063
(503) 238-7050 FAX: (503) 230-0477
Principals: A.T. Hjort
Activities: Structural, civil, mechanical and electrical engineering related to wastewater collection and treatment; water supply, distribution and treatment; water resource and water quality planning; urban drainage; harbors, ports and marinas; street, highway and bridge improvements; transportation; buildings; industrial facilities; including reports, studies, design plans and specifications and construction program management.
Ownership: Privately-owned corporation

VAN DOMELEN & LOOIJENGA & ASSOCIATES 13
3933 S.W. Kelly Avenue
Portland, OR 97201-4393
(503) 222-4453
Principals: Alfred H. Van Domelen, Dirk N. Looijenga, Jim Knauf, Roger McGarrigle
Activities: Civil/Structural - civil and structural consulting including structural design of commercial and industrial buildings, bridges, waterfront and miscellaneous structures. Structural investigations, feasibility studies, industrial site planning. Street, sanitary, storm drain, planning and design.
Ownership: Privately-owned corporation

VAN GULIK/OLIVER, INC. 7
543 3rd Street
Lake Oswego, OR 97034-3095
(503) 635-3734
Principals: Joe Van Gulik, Paul Oliver
Activities: Power plants, energy analysis, industrial and commercial, electrical, mechanical design, forensic engineering, acoustical consulting, field testing.
Ownership: Privately-owned corporation

WESTECH ENGINEERING, INC. 16
3421 - 25th Street, S.E.
Salem, OR 97302-1191
(503) 585-2474 FAX: (503) 585-3986
Branch Office
2300 Oakmont Way
Eugene, OR 97401-5530
(503) 485-4454
Branch Office
13500 SW 72nd Avenue
Portland, OR 97223
(503) 684-9226
Principals: Campbell H. Steketee, Jr., Steven A. Ward, Stephen C. Downs
Activities: Planning-design-construction control; water supply, storage and distribution; flood control, irrigation and drainage; sewage collection and treatment; subdivisions, mobile home parks, industrial sites; dams; bridges; structures; surveys; airports; shopping centers.
Ownership: Privately-owned corporation

JOHN WILLIAMS AND ASSOCIATES 1
15221 N.E. Schuyler Court
Portland, OR 97230-4651
(503) 255-5285
Principals: John W. Williams
Activities: Fire protection.
Ownership: Private-sole proprietorship

WILSEY & HAM PACIFIC, INC. 25
1099 SW Columbia
Portland, OR 97201
(503) 227-0455
Principals: William M. Jabs
Activities: Civil, structural and transportation engineering, planning, landscape architecture, surveying and construction management.
Ownership: Privately-owned corporation
Branch office of Wilsey & Ham Pacific, Inc., Bellevue, WA

WONG'S FORENSIC & METALLURGICAL ENGINEERS, INC. 6
30 S.E. 10th
Portland, OR 97214-1310
(503) 233-3600
Principals: Bruce L. Wong, John W. Biskey
Activities: Metallurgical, accident investigation, failure studies, analyses and reports, mechanic analysis, corrosion studies, welding analysis. Pressure vessel certification analysis, scanning electron microscopy.
Ownership: Privately-owned corporation

WRIGHT, R. A. ENGINEERING, INC. 11
1340 S.W. Bertha Blvd.
Portland, OR 97219-2099
(503) 246-4293
Principals: Kathleen Thomas, Robert A. Wright
Activities: Municipal engineering including wastewater systems, water storage and distribution, flood control, streets and drainage. Solid waste management including collection, transfer stations, energy recovery, landfills and hazardous waste materials. Land surveying including boundary, topography and subdivision.
Ownership: Privately-owned corporation (WBE)

YOUNGMAN, CHARLES L. , INC. 3
1375 Liberty Street, SE
Salem, OR 97302-5927
(503) 364-8027
Principals: Charles L. Youngman
Activities: Structural engineering planning and design solutions for new, damaged, historic and remodeled commercial or industrial buildings. Water, wastewater, hydraulic structures. Civil engineering applied to site planning, feasibility studies, streets, stormwater drainage, education institution facilities. Computer-aided design/drafting (CADD).
Ownership: Privately-owned corporation

JAMES R. ZACHRISON, CONSULTING ENGINEER 1
14995 S.E. Amisigger Road
Boring, OR 97009-9106
(503) 663-5793
Principals: James R. Zachrison
Activities: Structural: Planning, design and analysis of commercial and industrial buildings, churches and educational facilities, medical offices, nursing homes and retirement facilities.
Ownership: Private-sole proprietorship

ROBERT W. ZANDERS & ASSOCIATES 7
4520 S.W. Water Avenue
Portland, OR 97201-4030
(503) 224-4822 FAX: (503) 228-0761
Principals: Robert W. Zanders, Detlef C. Goepfert
Activities: Mechanical: Complete building environmental (HVAC) systems for educational, commercial, industrial, institutional and public facilities, including heating, ventilating, air conditioning, controls; central heating-cooling plants, passive and active solar systems, plumbing and fire protection systems, safety and life hazard improvements; site utilities. Reports and feasibility studies, energy cost evaluation and conservation studies, technical assistance studies; mechanical system evaluation, retrofit of existing systems, operating and preventative maintenance programs. Forensic engineering related to HVAC systems. Project and construction management, commissioning building HVAC systems.
Ownership: Privately-owned corporation

ZAROSINSKI-TATONE ENGINEERS, INC. 6
3737 S.E. 8th Avenue
Portland, OR 97202-3761
(503) 235-8795
Principals: Donald J. Zarosinski, Ronald G. Tatone
Activities: Complete engineering service for all types of civil and structural projects. These include docks and marine construction, stadium design, bridge design, hangar and hangar door design, urban planning and subdivision including streets, water distribution, sewers and sewage treatment.
Ownership: Privately-owned corporation

AFFILIATE MEMBERS

HURLEY, ATKINS & STEWART, INC.
500 Fairview Avenue North
Seattle, WA 98109
(503) 248-0431 or (206) 682-5656
Principals: Diane Brooke, Jack Doran, Anita Smith
Activities: Insurance brokers specializing in risk management, coverage analysis and placement for design professionals.
Ownership: Privately-owned corporation

HONORARY LIFE MEMBERS

LLOYD K. CLARK
369 McNary Estates Drive N.
Salem, OR 97303-4303
(503) 390-7890

WARREN W. CLARK
3544 Pioneer Drive, SE
Salem, OR 97302-2613
(503) 364-7342 or (503) 738-3544

HOLLY A. CORNELL
P.O. Box 428
Corvallis, OR 97339-0428
Office (503) 752-4271
Home (503) 694-5357

JAMES CROM
17749 SW Leafy Lane
Lake Oswego, OR 97034-6931
(503) 636-5176

JACK DOWNING
58787 Firlok Park Blvd.
St. Helens, OR 97051-2910
(503) 397-6469

ANTON DRESDEN
2430 S.W. Summitt Court
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Wirfs, Mark C.	R & W Engineering, Inc.	Portland	OR	297-5676
Wong, Bruce L.	Wong's Forensic & Metallurgical	Portland	OR	233-3600
Worth, Joseph E.	CH2M HILL	Portland	OR	224-9190
Wright, Robert A.	Wright, R.A. Engineering	Portland	OR	246-4293
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Youngman, Charles L	Youngman, Charles L., Inc.	Salem	OR	364-8207
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Zanders, Robert W.	Zanders, Robert W. & Assoc.	Portland	OR	224-4822
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